

Case 1: All test data in one input batch:

```
{ "id":1, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:00:55.000+03:00", "lon":0.227893604428281, "lat":0.665196507004088}
{ "id":2, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:01:58.000+03:00", "lon":0.602994134465229, "lat":0.670891438780961}
{ "id":3, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:02:34.000+03:00", "lon":0.497244459218679, "lat":0.132842745196235}
{ "id":4, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:03:14.000+03:00", "lon":0.6538836953106, "lat":0.107052170122542}
{ "id":5, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:04:55.000+03:00", "lon":0.763325446374881, "lat":0.406879504944238}
{ "id":6, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:05:22.000+03:00", "lon":0.505284381011548, "lat":0.222161796225816}
{ "id":7, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:06:42.000+03:00", "lon":0.504071655377987, "lat":0.122925369175258}
{ "id":8, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:07:52.000+03:00", "lon":0.544388045329271, "lat":0.529639148362446}
{ "id":9, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:07:52.000+03:00", "lon":0.544388045329271, "lat":0.529639148362446}
{ "id":10, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:08:31.000+03:00", "lon":0.594298442514952, "lat":0.0515273577513775}
{ "id":11, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:09:25.000+03:00", "lon":0.558231083857553, "lat":0.398130129985528}
{ "id":12, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:10:43.000+03:00", "lon":0.764259694270365, "lat":0.422195379622892}
{ "id":13, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:11:37.000+03:00", "lon":0.564555223457754, "lat":0.391626481792312}
{ "id":14, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:12:30.000+03:00", "lon":0.518866908107436, "lat":0.0522639759821863}
{ "id":15, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:13:12.000+03:00", "lon":0.467061065672263, "lat":0.704494992464332}
{ "id":16, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:14:14.000+03:00", "lon":0.729548791691987, "lat":0.148410502131407}
{ "id":17, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:15:03.000+03:00", "lon":0.710306878306147, "lat":0.555967587560861}
{ "id":18, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:16:04.000+03:00", "lon":0.339401480646038, "lat":0.721229310843413}
{ "id":19, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:17:27.000+03:00", "lon":0.654269970882771, "lat":0.544927802224382}
{ "id":20, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:18:27.000+03:00", "lon":0.633806348710528, "lat":0.0895440310696789}
{ "id":21, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:19:50.000+03:00", "lon":0.431748291853524, "lat":0.40740051465475}
{ "id":22, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:20:53.000+03:00", "lon":0.526385807035516, "lat":0.179707677939455}
{ "id":23, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:21:22.000+03:00", "lon":0.509677142750893, "lat":0.182941596767299}
{ "id":24, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:22:10.000+03:00", "lon":0.390219176268679, "lat":0.772231319171965}
{ "id":25, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:23:11.000+03:00", "lon":0.564986414794132, "lat":0.124542332916076}
{ "id":26, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:24:38.000+03:00", "lon":0.673215440224852, "lat":0.5307709771576}
```

```
{
  "id": 27,
  "trackId": "2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73",
  "eventTime": "2022-06-23T00:25:16.000+03:00",
  "lon": 0.573250915408031,
  "lat": 0.167310983885916
},
{
  "id": 28,
  "trackId": "2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73",
  "eventTime": "2022-06-23T00:26:50.000+03:00",
  "lon": 0.687022546141769,
  "lat": 0.547469918963258
},
{
  "id": 29,
  "trackId": "2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73",
  "eventTime": "2022-06-23T00:27:49.000+03:00",
  "lon": 0.580410488222464,
  "lat": 0.185151440965078
},
{
  "id": 30,
  "trackId": "2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73",
  "eventTime": "2022-06-23T00:28:46.000+03:00",
  "lon": 0.624553701284097,
  "lat": 0.109585414696552
},
{
  "id": 31,
  "trackId": "2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73",
  "eventTime": "2022-06-23T00:29:08.000+03:00",
  "lon": 0.388593225604423,
  "lat": 0.749856259555024
}
```

Expected result for track - 8034bb7e-260b-4340-9c08-f5ae357ad245:

```
{
  "id": 2,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:01:58.000+03:00",
  "lon": 0.602994134465229,
  "lat": 0.670891438780961
}
```

```
{
  "id": 4,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:03:14.000+03:00",
  "lon": 0.6538836953106,
  "lat": 0.107052170122542
}
```

```
{
  "id": 5,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:04:55.000+03:00",
  "lon": 0.763325446374881,
  "lat": 0.406879504944238
}
```

```
{
  "id": 6,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:05:22.000+03:00",
  "lon": 0.505284381011548,
  "lat": 0.222161796225816
}
```

```
{
  "id": 16,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:14:14.000+03:00",
  "lon": 0.729548791691987,
  "lat": 0.148410502131407
}
```

```
{
  "id": 17,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:15:03.000+03:00",
  "lon": 0.710306878306147,
  "lat": 0.555967587560861
}
```

```
{
  "id": 18,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:16:04.000+03:00",
  "lon": 0.339401480646038,
  "lat": 0.721229310843413
}
```

```
{
  "id": 19,
  "trackId": "8034bb7e-260b-4340-9c08-f5ae357ad245",
  "eventTime": "2022-06-23T00:17:27.000+03:00",
  "lon": 0.654269970882771,
  "lat": 0.544927802224382
}
```

1. 2022-06-23T00:01:58.000+03:00 - 2 - final
2. 2022-06-23T00:03:14.000+03:00 - 4
3. 2022-06-23T00:04:55.000+03:00 - 5
4. 2022-06-23T00:05:22.000+03:00 - 6
5. 2022-06-23T00:14:14.000+03:00 - 16 - intermediate + store for next step
6. 2022-06-23T00:15:03.000+03:00 - 17
7. 2022-06-23T00:16:04.000+03:00 - 18
8. 2022-06-23T00:17:27.000+03:00 - 19

Expected result for track - 749f1259-1e3b-40bc-92dd-142224ea3590:

```
{
  "id": 1,
  "trackId": "749f1259-1e3b-40bc-92dd-142224ea3590",
  "eventTime": "2022-06-23T00:00:55.000+03:00",
  "lon": 0.227893604428281,
  "lat": 0.665196507004088
}
```

```

{"id":7,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:06:42.000+03:00","lon":0.504071655377987,"lat":0.122925369175258}

{"id":8,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:07:52.000+03:00","lon":0.544388045329271,"lat":0.529639148362446}

{"id":9,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:07:52.000+03:00","lon":0.544388045329271,"lat":0.529639148362446}

{"id":10,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:08:31.000+03:00","lon":0.594298442514952,"lat":0.0515273577513775}

{"id":11,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:09:25.000+03:00","lon":0.558231083857553,"lat":0.398130129985528}

{"id":12,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:10:43.000+03:00","lon":0.764259694270365,"lat":0.422195379622892}

{"id":13,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:11:37.000+03:00","lon":0.564555223457754,"lat":0.391626481792312}

{"id":14,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:12:30.000+03:00","lon":0.518866908107436,"lat":0.0522639759821863}

{"id":15,"trackId":"749f1259-1e3b-40bc-92dd-142224ea3590","eventTime":"2022-06-23T00:13:12.000+03:00","lon":0.467061065672263,"lat":0.704494992464332}

```

1. 2022-06-23T00:00:55.000+03:00 - 1 - final
2. 2022-06-23T00:06:42.000+03:00 - 7
3. 2022-06-23T00:07:52.000+03:00 - 8
4. 2022-06-23T00:07:52.000+03:00 - 9
5. 2022-06-23T00:08:31.000+03:00 - 10
6. 2022-06-23T00:09:25.000+03:00 - 11
7. 2022-06-23T00:10:43.000+03:00 - 12
8. 2022-06-23T00:11:37.000+03:00 - 13 - intermediate + store for next step
9. 2022-06-23T00:12:30.000+03:00 - 14
10. 2022-06-23T00:13:12.000+03:00 - 15

Expected result for track - 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73:

```

{"id":3,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:02:34.000+03:00","lon":0.497244459218679,"lat":0.132842745196235}

```

```

{"id":20,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:18:27.000+03:00","lon":0.633806348710528,"lat":0.0895440310696789}
{"id":21,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:19:50.000+03:00","lon":0.431748291853524,"lat":0.40740051465475}

{"id":22,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:20:53.000+03:00","lon":0.526385807035516,"lat":0.179707677939455}

{"id":23,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:21:22.000+03:00","lon":0.509677142750893,"lat":0.182941596767299}

{"id":24,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:22:10.000+03:00","lon":0.390219176268679,"lat":0.772231319171965}

{"id":25,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:23:11.000+03:00","lon":0.564986414794132,"lat":0.124542332916076}

{"id":26,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:24:38.000+03:00","lon":0.673215440224852,"lat":0.5307709771576}

{"id":27,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:25:16.000+03:00","lon":0.573250915408031,"lat":0.167310983885916}

{"id":28,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:26:50.000+03:00","lon":0.687022546141769,"lat":0.547469918963258}

{"id":29,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:27:49.000+03:00","lon":0.580410488222464,"lat":0.185151440965078}

{"id":30,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:28:46.000+03:00","lon":0.624553701284097,"lat":0.109585414696552}

{"id":31,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:29:08.000+03:00","lon":0.388593225604423,"lat":0.749856259555024}

```

1. 2022-06-23T00:02:34.000+03:00 - 3 - final
2. 2022-06-23T00:18:27.000+03:00 - 20 - final
3. 2022-06-23T00:19:50.000+03:00 - 21
4. 2022-06-23T00:20:53.000+03:00 - 22
5. 2022-06-23T00:21:22.000+03:00 - 23
6. 2022-06-23T00:22:10.000+03:00 - 24
7. 2022-06-23T00:23:11.000+03:00 - 25
8. 2022-06-23T00:24:38.000+03:00 - 26
9. 2022-06-23T00:25:16.000+03:00 - 27
10. 2022-06-23T00:26:50.000+03:00 - 28
11. 2022-06-23T00:27:49.000+03:00 - 29
12. 2022-06-23T00:28:46.000+03:00 - 30 - intermediate + store for next step
13. 2022-06-23T00:29:08.000+03:00 - 31

Case 2: track 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73 data splitted to 3 input batches

Batch 1:

```
{ "id":1, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:00:55.000+03:00", "lon":0.227893604428281, "lat":0.665196507004088 }
{ "id":2, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:01:58.000+03:00", "lon":0.602994134465229, "lat":0.670891438780961 }
{ "id":3, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:02:34.000+03:00", "lon":0.497244459218679, "lat":0.132842745196235 }
{ "id":4, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:03:14.000+03:00", "lon":0.6538836953106, "lat":0.107052170122542 }
{ "id":5, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:04:55.000+03:00", "lon":0.763325446374881, "lat":0.406879504944238 }
{ "id":6, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:05:22.000+03:00", "lon":0.505284381011548, "lat":0.222161796225816 }
{ "id":7, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:06:42.000+03:00", "lon":0.504071655377987, "lat":0.122925369175258 }
{ "id":8, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:07:52.000+03:00", "lon":0.544388045329271, "lat":0.529639148362446 }
{ "id":9, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:07:52.000+03:00", "lon":0.544388045329271, "lat":0.529639148362446 }
{ "id":10, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:08:31.000+03:00", "lon":0.594298442514952, "lat":0.0515273577513775 }
```

Batch 1: group - 749f1259-1e3b-40bc-92dd-142224ea3590

```
{ "id":1, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:00:55.000+03:00", "lon":0.227893604428281, "lat":0.665196507004088 }

{ "id":7, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:06:42.000+03:00", "lon":0.504071655377987, "lat":0.122925369175258 }

{ "id":8, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:07:52.000+03:00", "lon":0.544388045329271, "lat":0.529639148362446 }

{ "id":9, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:07:52.000+03:00", "lon":0.544388045329271, "lat":0.529639148362446 }

{ "id":10, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:08:31.000+03:00", "lon":0.594298442514952, "lat":0.0515273577513775 }
```

1. 2022-06-23T00:00:55.000+03:00 - 1 - intermediate + next state
2. 2022-06-23T00:06:42.000+03:00 - 7
3. 2022-06-23T00:07:52.000+03:00 - 8
4. 2022-06-23T00:07:52.000+03:00 - 9
5. 2022-06-23T00:08:31.000+03:00 - 10

State for group 749f1259-1e3b-40bc-92dd-142224ea3590 after first batch:

State:

- startEventTime = 2022-06-23T00:00:55.000+03:00

- events = [{"id":1,...}, {"id":7,...}, {"id":8,...}, {"id":9,...}, {"id":10,...}]

Aggregated Event Result for group **749f1259-1e3b-40bc-92dd-142224ea3590** after first batch:

- trackId = **749f1259-1e3b-40bc-92dd-142224ea3590**
- events = [{"id":1,...}, {"id":7,...}, {"id":8,...}, {"id":9,...}, {"id":10,...}]
- eventsCount = 5
- isIntermediate = true

Batch 1: group - **8034bb7e-260b-4340-9c08-f5ae357ad245**

{"id":2,"trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245","eventTime":"2022-06-23T00:01:58.000+03:00","lon":0.602994134465229,"lat":0.670891438780961}

{"id":4,"trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245","eventTime":"2022-06-23T00:03:14.000+03:00","lon":0.6538836953106,"lat":0.107052170122542}

{"id":5,"trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245","eventTime":"2022-06-23T00:04:55.000+03:00","lon":0.763325446374881,"lat":0.406879504944238}

{"id":6,"trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245","eventTime":"2022-06-23T00:05:22.000+03:00","lon":0.505284381011548,"lat":0.222161796225816}

1. 2022-06-23T00:01:58.000+03:00 - 2 - intermediate + next state
2. 2022-06-23T00:03:14.000+03:00 - 4
3. 2022-06-23T00:04:55.000+03:00 - 5
4. 2022-06-23T00:05:22.000+03:00 - 6

State for group **8034bb7e-260b-4340-9c08-f5ae357ad245** after first batch:

State:

- startEventTime = **2022-06-23T00:01:58.000+03:00**
- events = [{"id":2,...}, {"id":4,...}, {"id":5,...}, {"id":6,...}]

Aggregated Event Result for group **8034bb7e-260b-4340-9c08-f5ae357ad245** after first batch:

- trackId = **8034bb7e-260b-4340-9c08-f5ae357ad245**
- events = [{"id":2,...}, {"id":4,...}, {"id":5,...}, {"id":6,...}]
- eventsCount = 4
- isIntermediate = true

Batch 1: group - **2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73**

{"id":3,"trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73","eventTime":"2022-06-23T00:02:34.000+03:00","lon":0.497244459218679,"lat":0.132842745196235}

1. 2022-06-23T00:02:34.000+03:00 - 3 - intermediate + next state

State for group **2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73** after first batch:

State:

- startEventTime = 2022-06-23T00:02:34.000+03:00
- events = [{"id":3,...}]

Aggregated Event Result for group 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73 after first batch:

- trackId = 749f1259-1e3b-40bc-92dd-142224ea3590
- events = [{"id":3,...}]
- eventsCount = 1
- isIntermediate = true

Batch 2:

```
{ "id":11, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:09:25.000+03:00", "lon":0.558231083857553, "lat":0.398130129985528 }
{ "id":12, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:10:43.000+03:00", "lon":0.764259694270365, "lat":0.422195379622892 }
{ "id":13, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:11:37.000+03:00", "lon":0.564555223457754, "lat":0.391626481792312 }
{ "id":14, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:12:30.000+03:00", "lon":0.518866908107436, "lat":0.0522639759821863 }
{ "id":15, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:13:12.000+03:00", "lon":0.467061065672263, "lat":0.704494992464332 }
{ "id":16, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:14:14.000+03:00", "lon":0.729548791691987, "lat":0.148410502131407 }
{ "id":17, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:15:03.000+03:00", "lon":0.710306878306147, "lat":0.555967587560861 }
{ "id":18, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:16:04.000+03:00", "lon":0.339401480646038, "lat":0.721229310843413 }
{ "id":19, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:17:27.000+03:00", "lon":0.654269970882771, "lat":0.544927802224382 }
{ "id":20, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:18:27.000+03:00", "lon":0.633806348710528, "lat":0.0895440310696789 }
```

Batch 2: group - 749f1259-1e3b-40bc-92dd-142224ea3590

```
{ "id":11, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:09:25.000+03:00", "lon":0.558231083857553, "lat":0.398130129985528 }
{ "id":12, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:10:43.000+03:00", "lon":0.764259694270365, "lat":0.422195379622892 }
{ "id":13, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:11:37.000+03:00", "lon":0.564555223457754, "lat":0.391626481792312 }
{ "id":14, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:12:30.000+03:00", "lon":0.518866908107436, "lat":0.0522639759821863 }
{ "id":15, "trackId":"749f1259-1e3b-40bc-92dd-142224ea3590", "eventTime":"2022-06-23T00:13:12.000+03:00", "lon":0.467061065672263, "lat":0.704494992464332 }
```

State for group 749f1259-1e3b-40bc-92dd-142224ea3590 after first batch:

State:

- startEventTime = 2022-06-23T00:00:55.000+03:00
- events = [{"id":1,...}, {"id":7,...}, {"id":8,...}, {"id":9,...}, {"id":10,...}]

1. 2022-06-23T00:09:25.000+03:00 - 11
2. 2022-06-23T00:10:43.000+03:00 - 12 - this event + state = final result
3. 2022-06-23T00:11:37.000+03:00 - 13
4. 2022-06-23T00:12:30.000+03:00 - 14
5. 2022-06-23T00:13:12.000+03:00 - 15 - intermediate result + next state

State for group 749f1259-1e3b-40bc-92dd-142224ea3590 after second batch:

State:

- startEventTime = 2022-06-23T00:10:43.000+03:00
- events = [{"id":13,...}, {"id":14,...}, {"id":15,...}]

Aggregated Event Results for group 749f1259-1e3b-40bc-92dd-142224ea3590 after second batch:

- First result
 - trackId = 749f1259-1e3b-40bc-92dd-142224ea3590
 - events = [{"id":1,...}, {"id":7,...}, {"id":8,...}, {"id":9,...}, {"id":10,...}, {"id":11,...}, {"id":12,...}]
 - eventsCount = 7
 - isIntermediate = false
- Second result
 - trackId = 749f1259-1e3b-40bc-92dd-142224ea3590
 - events = [{"id":13,...}, {"id":14,...}, {"id":15,...}]
 - eventsCount = 3
 - isIntermediate = true

Batch 2: group - 8034bb7e-260b-4340-9c08-f5ae357ad245

```
{ "id":16, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:14:14.000+03:00", "lon":0.729548791691987, "lat":0.148410502131407 }
{ "id":17, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:15:03.000+03:00", "lon":0.710306878306147, "lat":0.555967587560861 }
{ "id":18, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:16:04.000+03:00", "lon":0.339401480646038, "lat":0.721229310843413 }
{ "id":19, "trackId":"8034bb7e-260b-4340-9c08-f5ae357ad245", "eventTime":"2022-06-23T00:17:27.000+03:00", "lon":0.654269970882771, "lat":0.544927802224382 }
```

State for group 8034bb7e-260b-4340-9c08-f5ae357ad245 after first batch:

State:

- startEventTime = 2022-06-23T00:01:58.000+03:00
- events = [{"id":2,...}, {"id":4,...}, {"id":5,...}, {"id":6,...}]

State is now final result because: 2022-06-23T00:14:14.000+03:00 (first event from second batch id16) - 2022-06-23T00:01:58.000+03:00 (first event from state id2) ≥ 10 min

1. 2022-06-23T00:14:14.000+03:00 - 16 - intermediate + next step
2. 2022-06-23T00:15:03.000+03:00 - 17
3. 2022-06-23T00:16:04.000+03:00 - 18

4. 2022-06-23T00:17:27.000+03:00 - 19

State for group 8034bb7e-260b-4340-9c08-f5ae357ad245 after second batch:

State:

- startEventTime = 2022-06-23T00:14:14.000+03:00
- events = [{"id":16,...}, {"id":17,...}, {"id":18,...}, {"id":19,...}]

Aggregated Event Results for group 8034bb7e-260b-4340-9c08-f5ae357ad245 after second batch:

- First result
 - trackId = 8034bb7e-260b-4340-9c08-f5ae357ad245
 - events = [{"id":2,...}, {"id":4,...}, {"id":5,...}, {"id":6,...}]
 - eventsCount = 4
 - isIntermediate = false
- Second result
 - trackId = 8034bb7e-260b-4340-9c08-f5ae357ad245
 - events = [{"id":16,...}, {"id":17,...}, {"id":18,...}, {"id":19,...}]
 - eventsCount = 4
 - isIntermediate = true

Batch 2: group - 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73

```
{ "id":20, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:18:27.000+03:00", "lon":0.633806348710528, "lat":0.0895440310696789 }
```

State for group 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73 after first batch:

State:

- startEventTime = 2022-06-23T00:02:34.000+03:00
- events = [{"id":3,...}]

State is now final result because: 2022-06-23T00:18:27.000+03:00 (first event from second batch id20) - 2022-06-23T00:02:34.000+03:00 (first event from state id3) >= 10 min

1. 2022-06-23T00:02:34.000+03:00 - 20 - intermediate + next step

State for group 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73 after second batch:

State:

- startEventTime = 2022-06-23T00:02:34.000+03:00
- events = [{"id":20,...}]

Aggregated Event Results for group 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73 after second batch:

- First result
 - trackId = 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73
 - events = [{"id":3,...}]
 - eventsCount = 1
 - isIntermediate = false

- Second result
 - trackId = 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73
 - events = [{"id":20,...}]
 - eventsCount = 1
 - isIntermediate = true

Batch 3:

```
{ "id":21, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:19:50.000+03:00", "lon":0.431748291853524, "lat":0.40740051465475 }
{ "id":22, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:20:53.000+03:00", "lon":0.526385807035516, "lat":0.179707677939455 }
{ "id":23, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:21:22.000+03:00", "lon":0.509677142750893, "lat":0.182941596767299 }
{ "id":24, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:22:10.000+03:00", "lon":0.390219176268679, "lat":0.772231319171965 }
{ "id":25, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:23:11.000+03:00", "lon":0.564986414794132, "lat":0.124542332916076 }
{ "id":26, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:24:38.000+03:00", "lon":0.673215440224852, "lat":0.5307709771576 }
{ "id":27, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:25:16.000+03:00", "lon":0.573250915408031, "lat":0.167310983885916 }
{ "id":28, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:26:50.000+03:00", "lon":0.687022546141769, "lat":0.547469918963258 }
{ "id":29, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:27:49.000+03:00", "lon":0.580410488222464, "lat":0.185151440965078 }
{ "id":30, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:28:46.000+03:00", "lon":0.624553701284097, "lat":0.109585414696552 }
{ "id":31, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:29:08.000+03:00", "lon":0.388593225604423, "lat":0.749856259555024 }
```

Batch 3: group - 749f1259-1e3b-40bc-92dd-142224ea3590

There are no new events for this group!

State for group 749f1259-1e3b-40bc-92dd-142224ea3590 after second batch:

State:

- startEventTime = 2022-06-23T00:10:43.000+03:00
- events = [{"id":13,...}, {"id":14,...}, {"id":15,...}]

State for group 749f1259-1e3b-40bc-92dd-142224ea3590 after third batch the same as after second batch:

State:

- startEventTime = 2022-06-23T00:10:43.000+03:00
- events = [{"id":13,...}, {"id":14,...}, {"id":15,...}]

Batch 3: group - 8034bb7e-260b-4340-9c08-f5ae357ad245

There are no new events for this group!

State for group 8034bb7e-260b-4340-9c08-f5ae357ad245 after second batch:

State:

- startEventTime = 2022-06-23T00:14:14.000+03:00
- events = [{"id":16,...}, {"id":17,...}, {"id":18,...}, {"id":19,...}]

State for group **8034bb7e-260b-4340-9c08-f5ae357ad245** after third batch the same as after second batch:

State:

- `startEventTime = 2022-06-23T00:14:14.000+03:00`
- `events = [{"id":16,...}, {"id":17,...}, {"id":18,...}, {"id":19,...}]`

Batch 3: group - **2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73**

```
{ "id":21, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:19:50.000+03:00", "lon":0.431748291853524, "lat":0.40740051465475 }
{ "id":22, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:20:53.000+03:00", "lon":0.526385807035516, "lat":0.179707677939455 }
{ "id":23, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:21:22.000+03:00", "lon":0.509677142750893, "lat":0.182941596767299 }
{ "id":24, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:22:10.000+03:00", "lon":0.390219176268679, "lat":0.772231319171965 }
{ "id":25, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:23:11.000+03:00", "lon":0.564986414794132, "lat":0.124542332916076 }
{ "id":26, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:24:38.000+03:00", "lon":0.673215440224852, "lat":0.5307709771576 }
{ "id":27, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:25:16.000+03:00", "lon":0.573250915408031, "lat":0.167310983885916 }
{ "id":28, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:26:50.000+03:00", "lon":0.687022546141769, "lat":0.547469918963258 }
{ "id":29, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:27:49.000+03:00", "lon":0.580410488222464, "lat":0.185151440965078 }
{ "id":30, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:28:46.000+03:00", "lon":0.624553701284097, "lat":0.109585414696552 }
{ "id":31, "trackId":"2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73", "eventTime":"2022-06-23T00:29:08.000+03:00", "lon":0.388593225604423, "lat":0.749856259555024 }
```

State for group **2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73** after second batch:

State:

- `startEventTime = 2022-06-23T00:02:34.000+03:00`
- `events = [{"id":20,...}]`

1. `2022-06-23T00:19:50.000+03:00 - 21`
2. `2022-06-23T00:20:53.000+03:00 - 22`
3. `2022-06-23T00:21:22.000+03:00 - 23`
4. `2022-06-23T00:22:10.000+03:00 - 24`
5. `2022-06-23T00:23:11.000+03:00 - 25`
6. `2022-06-23T00:24:38.000+03:00 - 26`
7. `2022-06-23T00:25:16.000+03:00 - 27`
8. `2022-06-23T00:26:50.000+03:00 - 28`
9. `2022-06-23T00:27:49.000+03:00 - 29`
10. `2022-06-23T00:28:46.000+03:00 - 30 - intermediate + store for next step`
11. `2022-06-23T00:29:08.000+03:00 - 31`

State for group **2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73** after third batch:

State:

- startEventTime = 2022-06-23T00:28:46.000+03:00
- events = [{"id":30,...}, {"id":31,...}]

Aggregated Event Results for group 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73 after third batch:

- First result
 - trackId = 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73
 - events = [{"id":20,...}, {"id":21,...}, {"id":22,...}, {"id":23,...}, {"id":24,...}, {"id":25,...}, {"id":26,...}, {"id":27,...}, {"id":28,...}, {"id":29,...}]
 - eventsCount = 10
 - isIntermediate = false
- Second result
 - trackId = 2f6ca4e3-8fa9-4cd7-bcc9-67cec7db2a73
 - events = [{"id":30,...}, {"id":31,...}]
 - eventsCount = 2
 - isIntermediate = true